

(FILE 'HOME' ENTERED AT 17:53:53 ON 17 MAR 2002)

FILE 'REGISTRY' ENTERED AT 17:54:00 ON 17 MAR 2002

L1 0 S 1 METHYL PIPERAZINE/CN
L2 0 S 1 METHYLPIPERAZINE/CN
L3 374 S 1 METHYLPIPERAZINE
L4 1923 S METHYLPIPERAZINE
L5 1923 S METHYLPIPERAZINE
L6 1 S 109-01-3
L7 877 S BENZOPHENONE TETRACARBOXYLIC DIANHYDRIDE
L8 0 S BENZOPHENONE TETRACARBOXYLIC DIANHYDRIDE/CN
L9 0 S 3 3 4 4 BENZOPHENONE TETRACARBOXYLIC DIANHYDRIDE/CN
L10 1 S 2421-28-5
L11 3 S METHYLENE BIS 2 6 DIMETHYLANILINE
L12 1 S 4073-98-7
L13 178 S 4073-98-7/CRN
L14 4974 S 2421-28-5/CRN
L15 26 S L14 AND L13
L16 0 S L15 AND 109-01-3/CRN

FILE 'CA' ENTERED AT 18:02:26 ON 17 MAR 2002

L17 0 S L15 AND L16
L18 37 S L15

FILE 'REGISTRY' ENTERED AT 18:04:47 ON 17 MAR 2002

L19 7 S TETRAMETHYLPHENYLENE DIAMINE
L20 0 S 3102-8-2

FILE 'REGISTRY' ENTERED AT 18:05:53 ON 17 MAR 2002

L21 0 S 3102-8-2
L22 0 S 3102-8-2/CRN
L23 251 S 3102-87-2/CRN
L24 56 S L14 AND L23
L25 0 S L24 AND L6

FILE 'CA' ENTERED AT 18:07:10 ON 17 MAR 2002

L26 0 S L25
L27 1 S L24 AND L6
L28 1279 S POLYIMIDE AND ACID AND PHOTO?
L29 461 S L28 AND DEVELOP?
L30 1 S L29 AND METHYLPIPERAZINE
L31 9 S L29 AND ACIDIC

L18 ANSWER 5 OF 37 CA COPYRIGHT 2002 ACS
 AN 134:179130 CA
 TI The synthesis of copolymerized photosensitive polyimide and the research of photosensitivity
 AU Liu, Li; Zhu, Zi-Kang; Wang, Zong-Guang; Sun, Li-Min
 CS Polymer Material Research Institute, Chemistry and Chemical Engineering College, Shanghai Jiaotong University, Shanghai, 200240, Peop. Rep. China
 SO Gaofenzi Cailliao Kexue Yu Gongcheng (2000), 16(6), 54-56
 CODEN: GCKGEI; ISSN: 1000-7555
 PB Gaofenzi Cailliao Kexue Yu Gongcheng Bianjibu
 DT Journal
 LA Chinese
 CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 73
 AB Two kinds of diamine, 4,4'-diamino-3,3',5,5'-tetramethyldiphenylmethane (MDDM) and 2,3,5,6-tetramethyl-1,4-phenylene diamine, were synthesized successfully and polymd. with dianhydrides. The photosensitivity, thermal-stability, and soly. of the polyimides prepd. were detd. These co-polymd. auto-polyimides have good photosensitivity and excellent thermal stability.
 ST photosensitive polyimide prepn photosensitivity;
 diaminotetramethyldiphenylmethane prepn polymn photosensitive polyimide;
 tetramethylphenylene diamine prepn polymn photosensitive polyimide
 IT Polyketones
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (polyimide-; synthesis and photosensitive of photosensitive polyimides)
 IT Polyimides, preparation
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (polyketone-; synthesis and photosensitive of photosensitive polyimides)
 IT Light-sensitive materials
 Polymerization
 (synthesis and photosensitive of photosensitive polyimides)
 IT 28451-92-5P 53694-16-9P 96126-66-8P 96126-67-9P **96211-24-4P**
 96211-25-5P 326822-31-5P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and photosensitive of photosensitive polyimides)

L18 ANSWER 6 OF 37 CA COPYRIGHT 2002 ACS
 AN 134:71979 CA
 TI Preparation and characterization of photosensitive polyimides
 AU Yang, Lifang; Li, Zuobang; Cheng, Guoxiang; Yao, Kangde
 CS Research Institute of Polymeric Materials, Tianjin University, Tianjin, 300072, Peop. Rep. China
 SO Gongneng Cailiao (2000), 31(2), 196-199
 CODEN: GOCAEA; ISSN: 1001-9731
 PB Gongneng Cailiao Bianjibu
 DT Journal
 LA Chinese
 CC 35-5 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 37
 AB The sol. photosensitive polyimides (PSPI) were synthesized with arom. diamine monomers contg. benzophenone moiety (3,3',5,5'-tetramethyl-4,4'-diaminodiphenylmethane and 3,3',5,5'-tetramethyl-4,4'-diamino-diphenyl ketone) and 3,3',4,4'-benzophenone tetraboxylic dianhydride (BTDA), and characterized by means of WAXD (wide-angle x-ray diffraction), IR, UV, DSC, TGA, TMA and stress-strain anal. The process of the PSPI photocrosslinking reaction was monitored by IR method, and the apparent speed of the PSPI thermal decompn. reaction based on TGA was studied by the methods of deriv. thermogravimetry (DTG). The PSPI had high purity and self-hypersensitizing properties, and the prepg. method was simple and the mol. wts. of the resins were easy control.
 ST benzophenone tetraboxylic dianhydride photosensitive polyimide prepn
 IT Polyketones
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (polyimide-, arom.; prepn. and characterization of photosensitive polyimides)
 IT Polyimides, preparation
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (polyketone-, arom.; prepn. and characterization of photosensitive polyimides)
 IT Dielectric constant
 Light-sensitive materials
 Polymerization
 Solubility
 Thermal expansion
 Thermal stability
 (prepn. and characterization of photosensitive polyimides)
 IT 96126-65-7P 96126-67-9P **96211-24-4P** 96211-29-9P
315706-27-5P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and characterization of photosensitive polyimides)

L18 ANSWER 12 OF 37 CA COPYRIGHT 2002 ACS
 AN 130:45305 CA
 TI Chemical ray-sensitive polymer composition using photosensitive polyimide
 IN Yoshimura, Toshio; Yuba, Tomoyuki; Miura, Yasuo
 PA Toray Industries, Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-038
 ICS C08L079-08; G03F007-027; C08F002-50; C09D004-06
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10307392	A2	19981117	JP 1997-117139	19970507
AB	The title compn. contains a polymer based on a structural unit $\text{COR1(CO2R3)nCONHR2NH}$ (R1 = tri- or tetravalent C.gtoeq.2 org. group; R2 = divalent C.gtoeq.2 org. group; R3 = H, alkali metal ion, ammonium ion, C1-30 org. group; n = 1 or 2) and a compd. $\text{CH2:CR4CONHCR5R6R7}$ (R4 = H or Me; R5 = H or C1-6 org. group; R6 , R7 = C1-6 org. group). The compn. may also contain NR8R9R10 (R8-10 = C1-30 org. group, .gtoreq. 1 of R8-10 contain ethylenic unsatd. bond). The compn. shows high developability even after elapse of time after exposure and provides a high quality cured film with high mech. properties.				
ST	radiation sensitive resist polyamic acid polyimide; acrylamide radiation sensitive resist; amine radiation sensitive resist				
IT	Polyamic acids Polyimides, preparation RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (radiation-sensitive resist compn. contg. polyamic acid, acrylamide deriv., and amine compd.)				
IT	Resists (radiation-sensitive; radiation-sensitive resist compn. contg. polyamic acid and acrylamide deriv.)				
IT	110297-14-8P	216979-03-2P	216979-04-3P		
	RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (radiation-sensitive resist compn. contg. polyamic acid and acrylamide deriv.)				
IT	2210-24-4, N-Phenylacrylamide	2873-97-4, Diacetoneacrylamide			
	3729-16-6, N-tert-Amylacrylamide				
	RL: TEM (Technical or engineered material use); USES (Uses) (radiation-sensitive resist compn. contg. polyamic acid and acrylamide deriv.)				
IT	105-16-8, Diethylaminoethyl methacrylate				
	RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (radiation-sensitive resist compn. contg. polyamic acid, acrylamide deriv., and amine compd.)				

L18 ANSWER 7 OF 37 CA COPYRIGHT 2002 ACS
 AN 132:56997 CA
 TI Studies on negative photoresist based on photosensitive polyimides
 AU Li, Jiashen; Li, Zuobang; Zhu, Pukun; Yang, Lifang; Li, Fang
 CS Hebei University of Technology, Tianjin, Peop. Rep. China
 SO Ganguang Kexue Yu Guang Huaxue (1999), 17(4), 334-337
 CODEN: GKKHE9; ISSN: 1000-3231
 PB Kexue Chubanshe
 DT Journal
 LA Chinese
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 AB A kind of neg. photoresist, composed of photosensitive polyimides and
 N-methyl-2-pyrrolidone was formulated. The curing mechanism and the
 relationship of the properties and structure of PSPIs were studied. The
 results of TGA showed that the PSPIs have excellent heat-resistance.
 Based on our research, the pattern with line-width as low as 2.5 .mu.m was
 gained with the conventional UV photolithog. under the optimum parameters.
 ST neg photoresist photosensitive polyimide methyl pyrrolidone
 IT Negative photoresists
 Photolithography
 Thermogravimetric analysis
 (study on neg. photoresist based on photosensitive polyimide)
 IT Polyimides, properties
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (study on neg. photoresist based on photosensitive polyimide)
 IT 96126-65-7P 96126-67-9P 96126-69-1P **96211-24-4P**
 96211-29-9P 96211-30-2P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (study on neg. photoresist based on photosensitive polyimide)
 IT 872-50-4, N-Methyl-2-pyrrolidone, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (study on neg. photoresist based on photosensitive polyimide)

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(FILE 'HOME' ENTERED AT 17:53:53 ON 17 MAR 2002)

FILE 'REGISTRY' ENTERED AT 17:54:00 ON 17 MAR 2002

L1	0 S 1 METHYL PIPERAZINE/CN
L2	0 S 1 METHYLPIPERAZINE/CN
L3	374 S 1 METHYLPIPERAZINE
L4	1923 S METHYLPIPERAZINE
L5	1923 S METHYLPIPERAZINE
L6	1 S 109-01-3
L7	877 S BENZOPHENONE TETRACARBOXYLIC DIANHYDRIDE
L8	0 S BENZOPHENONE TETRACARBOXYLIC DIANHYDRIDE/CN
L9	0 S 3 3 4 4 BENZOPHENONE TETRACARBOXYLIC DIANHYDRIDE/CN
L10	1 S 2421-28-5
L11	3 S METHYLENE BIS 2 6 DIMETHYLANILINE
L12	1 S 4073-98-7
L13	178 S 4073-98-7/CRN
L14	4974 S 2421-28-5/CRN
L15	26 S L14 AND L13
L16	0 S L15 AND 109-01-3/CRN

FILE 'CA' ENTERED AT 18:02:26 ON 17 MAR 2002

L17	0 S L15 AND L16
L18	37 S L15

L27 ANSWER 1 OF 1 CA COPYRIGHT 2002 ACS
 AN 135:325244 CA
 TI Photoimageable, aqueous acid soluble polyimide polymers
 IN Mao, Guoping; Pocius, Alphonsus; Somasiri, Nanayakkara L. D.; Viehbeck, Alfred; Eitouni, Hany B.; Scheibner, John; Stacey, Nicholas A.
 PA 3M Innovative Properties Company, USA
 SO PCT Int. Appl., 26 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM G03F007-038
 ICS G03F007-16; C08G073-10
 CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38, 42, 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001077753	A1	20011018	WO 2000-US21599	20000808
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 2000-547390	A	20000411		
AB	A photoimageable, aq. acid sol. polyimide polymer comprises an anhydride, including a substituted benzophenone nucleus, a diamine reacted with the anhydride to form a photosensitive polymer intermediate, and at least 60 Mol of solubilizing amine reacted with the photosensitive polymer intermediate to form the photoimageable, aq. acid sol. polyimide polymer. An emulsion for electrophoretic deposition of a coating of a photoimageable, aq. acid sol. polyimide polymer comprises a dispersed phase, including the photoimageable aq. acid sol. polyimide polymer, dissolved in an org. solvent and a dispersion phase including a coalescence promoter and water. The emulsion may be applied, by electrophoretic deposition, to a conductive structure to provide a photoimageable coating on the conductive structure. After exposing the coating to a pattern of radiation for photocrosslinking exposed parts of the photoimageable aq. acid sol. polyimide polymer, an aq. acid developer soln. removes unexposed photoimageable aq. acid sol. polyimide polymer to reveal a crosslinked polyimide polymer image of the radiation pattern.				
ST	photoimaging material aq acid soluble polyimide isopolyimide;				
IT	electrophoretic deposition				
IT	Photoimaging materials				
	(aq. acid sol. photoimageable polyimide polymers)				
IT	Electrophoretic deposition				
	(emulsion of aq. acid sol. photoimageable polyimide polymers coated on conductive surfaces by)				
IT	Polyimides, preparation				
	RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				
	(isopolyimides; aq. acid sol. photoimageable polyimide polymers)				
IT	109-01-3D, 1-Methylpiperazine, reaction products with polyisoimide				
	RL: RCT (Reactant)				
	(aq. acid sol. photoimageable polyimide polymers)				
IT	96126-39-5DP, reaction products with methylpiperazine				
	367925-50-6DP, reaction products with methylpiperazine				
	RL: SPN (Synthetic preparation); TEM (Technical or engineered material				

use); PREP (Preparation); USES (Uses)
(aq. acid sol. photoimageable polyimide polymers)
IT 111-76-2, Butyl cellosolve
RL: TEM (Technical or engineered material use); USES (Uses)
(coalescence promoter for emulsion of aq. acid sol. photoimageable
polyimide polymers for electrophoretic deposition on conductive
surfaces)
IT 64-19-7, Acetic acid, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(developer for aq. acid sol. photoimageable polyimide polymers)
IT 96211-25-5DP, reaction products with methylpiperazine
RL: SPN (Synthetic preparation); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(polyisoimide; aq. acid sol. photoimageable polyimide polymers)
IT 872-50-4, N-Methylpyrrolidone, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(solvent for emulsion of aq. acid sol. photoimageable polyimide
polymers for electrophoretic deposition on conductive surfaces)
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Chisso Corp; EP 0337698 A 1989 CA
- (2) Chisso Corp; EP 0341028 A 1989 CA
- (3) Chisso Corp; EP 0456469 A 1991 CA
- (4) Chisso Corp; EP 0348092 B 1993 CA
- (5) Frank, E; US 5187241 A 1993 CA
- (6) Ibm; EP 0535444 A 1993 CA
- (7) Shipley Co; EP 0407951 A 1991
- (8) Shipley Co; EP 0449022 A 1991 CA

IT 2420-27-1, Melamine, N2,N4,N6-tris(methoxymethyl) -
(as gelling agent in foams of Et acrylate)

IT 102-71-6, Ethanol, 2,2',2''-nitrilotri- 120-93-4,
2-Imidazolidinone 1017-56-7, Methanol, (s-triazine-2,4,6-
triyiltriiimino)tri- 4473-43-2, Methanol, [[6-[(hydroxymethyl)amino]-s-
triazine-2,4-diyl]bis[(methoxymethyl)imino]di-
(as gelling agent in foams of Et acrylate polymers with reactive
monomers)

IT 25584-67-2, Methacrylic acid, 2,3-epoxypropyl ester polymer with
methacrylic acid 26591-04-8, Methacrylic acid, 2,3-epoxypropyl
ester polymer with Et acrylate
(foamed by agitation and gelled)

IT 79-06-1, Acrylamide
(polymers with Et acrylate and reactive monomers, foamed by agitation
and gelled)

IT 39465-47-9, Ethylene glycol, acrylate
(prepn. of)

IT 9003-32-1, Acrylic acid, ethyl ester polymers
(with reactive monomers, foamed by agitation and gelled)

L13 ANSWER 9 OF 90 CA COPYRIGHT 2002 ACS

AN 135:168078 CA

TI Water-thinned ink compositions containing microfibers

IN Nagami, Shigeru

PA Mitsubishi Pencil Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-02

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 40

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 2001226620	A2	20010821	JP 2000-33655	20000210
AB	The title compns., capable of over-writing with pencil after drying, useful for writing, stamps, printers, printing, etc. (no data), contain pigments (e.g., TiO ₂ , blue pigment, Aizen Primula Red 4BH, Aizen Primula Yellow GCLH), solvents (e.g., amino Me propanol, triethanolamine, propylene glycol), resins (e.g., Joncryl 62, Jurymer AT 210), and 5.0-40.0% natural or synthetic fibers with length 0.1 nm-1 mm (e.g., paper clay, silk, cotton).				
ST	microfiber contg water thinned ink				
IT	Pigments, nonbiological				
	(blue; water-thinned ink compns. contg. microfibers)				
IT	Cotton				
	Paper				
	Silk				
	(microfibers; water-thinned ink compns. contg. microfibers)				
IT	2610-11-9, Aizen Primula Red 4BH				
	RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)				
	(Aizen Primula Red 4BH; water-thinned ink compns. contg. microfibers)				
IT	8005-52-5, Aizen Primula Yellow GCLH				
	RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)				
	(Aizen Primula Yellow GCLH; water-thinned ink compns. contg. microfibers)				
IT	35209-54-2, Joncryl 62				
	RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)				
	(Joncryl 62; water-thinned ink compns. contg. microfibers)				
IT	67923-97-1, Jurymer AT 210				
	RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)				
	(Jurymer AT 210; water-thinned ink compns. contg. microfibers)				
IT	57-55-6, Propylene glycol, uses 102-71-6, Triethanolamine, uses 124-68-5				
	RL: TEM (Technical or engineered material use); USES (Uses)				
	(solvents; water-thinned ink compns. contg. microfibers)				
IT	13463-67-7, Titanium oxide (TiO ₂), uses				
	RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)				
	(water-thinned ink compns. contg. microfibers)				

AN 114:145547 CA
 TI Manufacture of water-thinned coating compositions
 IN Tomihari, Hiromichi; Yamazaki, Tsunekichi
 PA Yushiro Chemical Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F220-04

ICS C08F002-04; C08F220-10

CC 42-7 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02263811	A2	19901026	JP 1989-84743	19890405 <--
	JP 06055923	B4	19940727		

AB Title compns., useful for corrosion prevention, are manufd. by polymg. .alpha.,.beta.-unsatd. acids and (meth)acrylate esters in a surfactant-free volatile solvent, adding a volatile alk. substance and H2O to neutralize the acidic sites of the copolymers, and polymg. .alpha.,.beta.-unsatd. acids and (meth)acrylate esters in the resulting aq. soln. The compns. contain .ltoreq.5% volatile solvent and form films with glass transition temp. (Tg) 0-50.degree.. Thus, acrylic acid, Bu acrylate, and Me acrylate were polymd. in iso-PrOH in the presence of benzoyl peroxide at 82-86.degree., neutralized with 25% aq. NH3, dild. with H2O until nonvolatile content 5%, mixed with K2S2O8, heated at 75-80.degree., treated dropwise with a mixt. of acrylic acid, Bu acrylate, Me acrylate, and dodecyl mercaptan, and allowed to polymerize to give a coating compn. The compn. contained 3.0% iso-PrOH and formed a film with Tg 28.degree. and good resistance to heat, weather, and water, and easy peelability by immersion in 0.3% aq. KOH when sprayed to a mild steel sheet.

ST water thinned acrylate copolymer coating; peelable acrylic anticorrosive coating

IT Coating materials

(anticorrosive, water-thinned, .alpha.,.beta.-unsatd. acid-(meth)acrylate copolymers, for metals)

IT 26338-06-7P, Ethyl acrylate-methacrylic acidmethyl acrylate copolymer
 27083-50-7P, Acrylic acidbutyl acrylatemethyl acrylate copolymer

RL: PREP (Preparation)

(prepn. of, for anticorrosive waterborne coatings for metals)

L13 ANSWER 42 OF 90 CA COPYRIGHT 2002 ACS
 AN 119:252188 CA
 TI Pigment dispersion in water-based paints using amphoteric acrylic resins
 AU Kobayashi, T.; Kageyama, H.; Ikeda, S.
 CS Res. Cent., Nippon Paint Co., Ltd., Neyagawa, 572, Japan
 SO Polymeric Materials Science and Engineering (1992), 66, 72-4
 CODEN: PMSEDG; ISSN: 0743-0515
 DT Journal
 LA English
 CC 42-6 (Coatings, Inks, and Related Products)
 AB Two series of amphoteric water-sol. acrylic resins were prepd. and used
 for dispersion of carbon black and TiO₂ pigments. In the anionic resin
 system, the dispersibility of a neg. charged pigment increased as the base
 amt. of resin increased only when the base strength of resin was higher
 than neutralizing amine. In the cationic resin system, the dispersibility
 of a pos. charged pigment increased as the acid amt. of resin increased
 when the acid strength of resin was higher than neutralizing acid.
 ST acrylic resin pigment dispersion; carbon black pigment dispersion acrylic;
 titania pigment dispersion acrylic resin
 IT Pigments
 (dispersion of, by amphoteric acrylic resins)
 IT Carbon black, uses
 RL: USES (Uses)
 (pigments, dispersion of, by amphoteric acrylic resins)
 IT 41774-83-8, Ethyl acrylate-2-hydroxyethyl acrylate-methacrylic
 acid-methyl methacrylate copolymer 139321-72-5
 151273-93-7 151273-94-8
 RL: USES (Uses)
 (carbon black and titania pigments dispersion by)
 IT 64-18-6, Formic acid, miscellaneous 79-09-4, Propionic acid,
 miscellaneous 102-71-6, Triethanolamine, miscellaneous
 121-44-8, Triethylamine, miscellaneous
 RL: MSC (Miscellaneous)
 (carbon black and titania pigments dispersion by amphoteric acrylic
 resins in presence of)
 IT 13463-67-7, Tipaque CR 50, uses
 RL: USES (Uses)
 (pigments, dispersion of, by amphoteric acrylic resins)

13 ANSWER 35 OF 90 CA COPYRIGHT 2002 ACS

AN 123:34711 CA

TI Binder for fibrous insulation mats

IN Veverka, Josef

PA Czech Rep.

SO Czech Rep., 4 pp.

CODEN: CZXXED

DT Patent

LA Czech

IC C08L033-06; C03B037-10

CC 38-2 (Plastics Fabrication and Uses)

Section cross-reference(s): 57, 58

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CZ 278525	B6	19940216	CZ 1992-451	19920214
AB	The binder consists of a water-sol. copolymer of acrylic acid and/or methacrylic acid with acrylic acid esters and/or methacrylic acid esters contg. 2-8 C atoms in the alkyl chains 2-10, water-sol. melamine resin 0.01-1, water 85-99, and .gtoreq.1 additive from a group of pH-adjusting substances, hardening catalysts, coalescent substances, antifoaming agents, conservation agents, biocides, alcs., surfactants, salts, dyes, and pigments 0.01-8 wt. parts. The binder does not release formaldehyde and/or volatile org. solvents during manuf. and use. The binder is suitable for manuf. of thermal insulation and sound insulation mats contg. glass, basalt, slag, or ceramic fibers.				
ST	binder fibrous insulation mat; thermal insulator binder; sound insulator binder				
IT	Building materials Sound insulators Thermal insulators (binder for fibrous insulation mats for)				
IT	Binding materials (for fibrous insulation mats for thermal and sound insulators)				
IT	Antifoaming agents Biocides Surfactants (in manuf. of fibrous insulation mats for thermal and sound insulators)				
IT	Glass fibers, uses RL: NUU (Other use, unclassified); USES (Uses) (in manuf. of fibrous insulation mats for thermal and sound insulators)				
IT	Synthetic fibers RL: NUU (Other use, unclassified); USES (Uses) (basalt, in manuf. of fibrous insulation mats for thermal and sound insulators)				
IT	Synthetic fibers RL: NUU (Other use, unclassified); USES (Uses) (ceramic, in manuf. of fibrous insulation mats for thermal and sound insulators)				
IT	Basalt RL: NUU (Other use, unclassified); USES (Uses) (fiber, in manuf. of fibrous insulation mats for thermal and sound insulators)				
IT	Ceramic materials and wares RL: NUU (Other use, unclassified); USES (Uses) (fibers, in manuf. of fibrous insulation mats for thermal and sound insulators)				
IT	Synthetic fibers RL: NUU (Other use, unclassified); USES (Uses) (slag, in manuf. of fibrous insulation mats for thermal and sound insulators)				
IT	64-17-5, Ethanol, uses 67-63-0, Isopropanol, uses 102-71-6, Triethanolamine, uses 104-15-4, uses 1336-21-6, Ammonium hydroxide 2634-33-5, 1,2-Benzisothiazol-3(2H)-one 7778-80-5, Potassium sulfate,				

uses 9003-08-1, Formaldehyde-melamine copolymer 9016-45-9,
Polyethylene glycol nonylphenyl ether 25035-82-9, Butyl
acrylate-methacrylic acid copolymer 25085-35-2, Acrylic
acid-ethyl acrylate copolymer 52250-42-7 164145-95-3
RL: NUU (Other use, unclassified); USES (Uses)
(in binder for manuf. of fibrous insulation mats for thermal and sound
insulators)

IT 1332-37-2, Iron oxide, uses
RL: NUU (Other use, unclassified); USES (Uses)
(pigment; in binder for manuf. of fibrous insulation mats for thermal
and sound insulators)

L13 ANSWER 72 OF 90 CA COPYRIGHT 2002 ACS
 AN 94:88408 CA
 TI Water-soluble film-type corrosion inhibitors
 PA Mitsubishi Heavy Industries, Ltd., Japan; Kyoeisha Yushi Kagaku Kogyo Co., Ltd.
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC C23F011-12
 CC 55-9 (Ferrous Metals and Alloys)
 Section cross-reference(s): 37

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 55089477	A2	19800707	JP 1978-161101	19781228
AB	Polymer or copolymer of carboxylic acid or its deriv. is treated with an alkali soln., optionally mixed with a corrosion inhibitor, and used for corrosion prevention. Thus, 200 g acrylic acid-Et acrylate copolymer [25085-35-2] was mixed with 21 g NaOH and 679 g water, heated to 70.degree., mixed with 60 g triethanolamine, and coated on a SS 41 [12732-02-4] steel pipe at 80 g/m2. When the pipe was wrapped with poly(vinyl chloride) [9002-86-2] sheet and kept outdoors, no corrosion was obsd. even after 1 yr.				
ST	corrosion inhibitor polymer steel				
IT	Coating materials (corrosion inhibitors, polymers, on steel pipes for corrosion prevention)				
IT	12732-02-4, uses and miscellaneous RL: USES (Uses) (coating of pipes from, with polymers for corrosion prevention)				
IT	25085-35-2 RL: USES (Uses) (coatings contg., on steel for corrosion prevention)				
IT	102-71-6, uses and miscellaneous 1310-73-2, uses and miscellaneous RL: USES (Uses) (polymer coatings contg., on steel for corrosion prevention)				
IT	9002-86-2 RL: USES (Uses) (wrapping with, of polymer-coated steel pipe for corrosion prevention)				

L13 ANSWER 63 OF 90 CA COPYRIGHT 2002 ACS
 AN 107:87228 CA
 TI Developer for presensitized lithographic plates and development method
 IN Nogami, Akira; Uehara, Masabumi; Kiyono, Minoru; Nakano, Mieji
 PA Konishiroku Photo Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03C005-24
 ICS G03C005-30
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 62035351	A2	19870216	JP 1985-175402	19850808
AB	A presensitized plate developer (11.5 < pH < 13.3) contg. an alk. agent, an anionic surfactant, and a suflite is claimed. Automatic development of neg. and pos. presensitized plates by using the developer is also claimed. The contents of the anionic surfactant and the sulfite are preferably 0.2-10 and 0.1-10 wt.%, resp. Neg. presensitized lithog. plates contg. a polymer with an acid value of 30-300 are preferably used.				
ST	presensitized plate developer				
IT	Lithographic plates (presensitized, developer for neg. and pos.)				
IT	77-98-5 102-71-6, Triethanolamine, uses and miscellaneous 111-42-2, Diethanolamine, uses and miscellaneous 497-19-8, Sodium carbonate, uses and miscellaneous 1344-09-8, Sodium silicate 7558-79-4, Disodium hydrogen phosphate 7601-54-9, Trisodium phosphate 7757-83-7, Sodium sulfite 87068-17-5, Pelex NBL				
	RL: USES (Uses) (developer contg., for neg. and pos. presensitized lithog. plates)				
IT	77833-95-5				
	RL: USES (Uses) (presensitized plates contg., developers for)				

L13 ANSWER 59 OF 90 CA COPYRIGHT 2002 ACS

AN 111:41523 CA

TI Shrink-resistant unsaturated acid-containing polymer putty

IN Stepita, Matej

PA Czech.

SO Czech., 3 pp.

CODEN: CZXXA9

DT Patent

LA Czech

IC ICM C09D005-34

ICS C09K003-10

CC 42-11 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CS 250322	B1	19870416	CS 1985-1750	19850313
AB	The title putty contains 20-55 parts 40-60% solids aq. dispersions of a copolymer contg. 4-35% (meth)acrylic, crotonic, or itaconic acid units, 1.5-15 parts C3-12 alkylamines or alkanolamines, 5-20 parts phthalate plasticizers, 6-20 parts thixotropic fillers, 30-60 parts ground limestone (particle size .ltoreq.0.5 mm), and 0.4-2 parts pulp. The putties may contain 1-5% hydrophobic additives (e.g., fatty acids and their salts) and 0.5-3% pigments. The putties form an elastic impermeable film on surfaces and are suitable for filling cavities and joints, smoothening surfaces, and elastic bonding of construction elements. Thus, a putty contg. 32 parts 50% aq. dispersion of acrylic acid-2-ethylhexyl acrylate-styrene copolymer with acrylic acid content 5%, 2.2 parts diethylaminoethanol, 9 parts di-Bu phthalate, 3 parts Ca stearate, 12.8 parts colloidal silica, 40 parts ground limestone, and 1 part pulp exhibited high adhesion to silicate materials and resistance to temp. changes from -30.degree. to 90.degree. and good resistance to alkalis and weather.				
ST	shrink resistant putty; acrylic acid copolymer putty; styrene acrylic putty; acrylate copolymer putty; aminoethanol putty; phthalate ester putty; calcium stearate putty; silica putty; limestone putty; pulp putty				
IT	Chalk				
	RL: USES (Uses)				
	(fillers, thixotropic, for shrink-resistant unsatd. acid-contg. polymer putties)				
IT	Plasticizers				
	(phthalate esters, for shrink-resistant unsatd. acid-contg. polymer putties)				
IT	Pigments				
	Pulp, cellulose				
	Amines, uses and miscellaneous				
	Limestone, uses and miscellaneous				
	RL: USES (Uses)				
	(unsatd. acid-contg. polymer putties contg., shrink-resistant)				
IT	Putty				
	(unsatd. acid-contg. polymers, shrink-resistant)				
IT	Thixotropy				
	(agents, silica and chalk, for shrink-resistant unsatd. acid-contg. polymer putties)				
IT	7631-86-9, Silica, uses and miscellaneous				
	RL: USES (Uses)				
	(fillers, thixotropic, for shrink-resistant unsatd. acid-contg. polymer putties)				
IT	1592-23-0, Calcium stearate				
	RL: USES (Uses)				
	(hydrophobic additives, for shrink-resistant unsatd. acid-contg. polymer putties)				
IT	84-74-2, Dibutyl phthalate 117-81-7, DOP				
	RL: MOA (Modifier or additive use); USES (Uses)				
	(plasticizers, for shrink-resistant unsatd. acid-contg. polymer putties)				

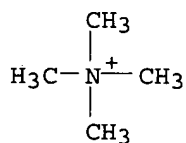
IT 9004-34-6
RL: USES (Uses)
(pulp, unsatd. acid-contg. polymer putties contg., shrink-resistant)

IT 25085-19-2, Acrylic acid-2-ethylhexyl acrylate-styrene copolymer
121466-03-3, Butyl acrylate-crotonic acid-ethyl
acrylate-methacrylic acid copolymer
RL: USES (Uses)
(putties, shrink-resistant)

IT 100-37-8, Diethylaminoethanol 101-83-7, Dicyclohexylamine
102-71-6, uses and miscellaneous 105-59-9 109-89-7,
Diethylamine, uses and miscellaneous 111-42-2, uses and miscellaneous
121-44-8, uses and miscellaneous
RL: USES (Uses)
(unsatd. acid-contg. polymer putties contg., shrink-resistant)

L13 ANSWER 47 OF 90 CA COPYRIGHT 2002 ACS
 AN 116:153879 CA
 TI Pigment dispersion in water-soluble acrylic resins. (III). Electrostatic interaction between an amphoteric acrylic resin and a pigment, and its effect on the pigment dispersibility
 AU Kageyama, Hiroyuki; Kobayashi, Toshikatsu; Ikeda, Shouji
 CS Res. Cent., Nippon Paint Co. Ltd., Neyagawa, Japan
 SO Shikizai Kyokaishi (1991), 64(9), 572-9
 CODEN: SKYOA0; ISSN: 0010-180X
 DT Journal
 LA Japanese
 CC 42-6 (Coatings, Inks, and Related Products)
 AB Pigment dispersion in an amine-neutralized water-sol. acrylic resin which has both basic and acidic functional groups was studied. For dispersion of carbon black with neg. charged surface in the aq. media, an excellent dispersibility was obtained by resin adsorption through electrostatic interaction between neg. charge of the pigment and pos. charge of the resin when the base strength of the resin was higher than that of the neutralizing amine. On the other hand, when the base strength of the amine was higher, no effect on the introduction of the basic functional group to the resin was obsd. In the case of the pigment with pos. charged surface, the foregoing method resulted in the increase in the yield value of the dispersed paste as the degree of dispersion increased.
 ST pigment dispersion acrylic resin coating; carbon black dispersion acrylic coating; electrostatic interaction pigment acrylic coating; amine neutralized acrylic coating pigment
 IT Carbon black, properties
 RL: PRP (Properties)
 (pigments, dispersion of, in amine-neutralized acrylic resin coatings, electrostatic interaction in relation to)
 IT Potential energy and function
 (electrostatic, dispersion of carbon black pigment in amine-neutralized acrylic coatings in relation to)
 IT Coating materials
 (water-sol., amine-neutralized acrylic resins, carbon black dispersion in, electrostatic interaction in relation to)
 IT 102-71-6, Triethanolamine, uses 108-01-0, Dimethylethanolamine 111-42-2, uses 121-44-8, Triethylamine, uses 141-43-5, Ethanolamine, uses
 RL: USES (Uses)
 (acrylic resin coatings contg., carbon black dispersion in, electrostatic interaction in relation to)
 IT 41774-83-8, Ethyl acrylate-hydroxyethyl acrylate-methacrylic acidmethyl methacrylate copolymer 139321-72-5
 RL: TEM (Technical or engineered material use); USES (Uses)
 (coatings, contg. amines, carbon black dispersion in, electrostatic interaction in relation to)

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
 RN 75-59-2 REGISTRY
 CN Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Ammonium, tetramethyl-, hydroxide (8CI)
 CN **Tetramethylammonium hydroxide (6CI)**
 OTHER NAMES:
 CN AZ 726
 CN AZ 726MIF
 CN AZ-MIF 300
 CN LDD 26W
 CN Megaposit CD 14
 CN MF 321
 CN NMD 3
 CN NMW-W
 CN OCG 945
 CN OCG-OPD 262
 CN OPD 262
 CN TMAH
 CN TMAH 25
 CN Tokuso SD 20
 DR 123626-97-1, 129654-61-1, 93615-68-0, 104422-11-9, 105468-35-7,
 78017-87-5, 154636-59-6, 195460-17-4
 MF C4 H12 N . H O
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA,
 CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN,
 CSCHM, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB,
 MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER,
 USPAT2, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)
 CRN (51-92-3)



⊙ OH⁻

3445 REFERENCES IN FILE CA (1962 TO DATE)
 49 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 3448 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 54 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

THE TETRAMETHYLAMMONIUM ION (TMA), AS TMAH, IN THIS DEVELOPER IS TOXIC AT LOW LEVELS TO THE WATER FLEA CERIODAPHNIA DUBIA (CD) USED IN THE WHOLE EFFLUENT TOXICITY (WET) BIOMONITORING TEST. DATA FROM THE SUPPLIER SUGGESTS THAT CONTINUOUS INPUT OF 60-100 PPM TMA TO A SMALL POTW SHOULD NOT CAUSE WET TOXICITY. IT IS EXPECTED THAT DISCHARGES TO A SIZABLE POTW WILL NOT AFFECT THE ABILITY TO PASS THE WET TESTS. HOWEVER, DISCHARGES TO A SMALL POTW OR DIRECT DISCHARGES TO SURFACE WATERS SHOULD BE CAREFULLY REVIEWED. CONTACT AZ ELECTRONIC MATERIALS PRODUCT SAFETY FOR ADDITIONAL INFORMATION (908-429-3593 OR 908-429-3562).

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L13 ANSWER 90 OF 90 CA COPYRIGHT 2002 ACS

AN 63:99514 CA

OREF 63:18389h,18390a-b

TI Vinyl polymer foams

IN Gill, Robert A.; St. Clair, Robert G.

PA Rohm & Haas Co.

SO 39 pp.

DT Patent

LA Unavailable

CC 48 (Plastics Technology)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 660884		19650910	BE	
	FR 1433650			FR	

PRAI US 19640310

AB Mixts. contg. (1) a H₂O-insol. copolymer (I), which contains 1-30 wt. % monomer contg. a reactive group: OH, CO₂H, OH, SO₃H, H₂NCONH, SH, or vic-epoxy, and 70-99 wt. % neutral monomer; and (2) a foaming agent, such as a dialkyl sulfosuccinate or an alkylphenol-alkylene oxide addn. product, are heated to give foams; also used are I contg. 1-30 wt. % compd. of the general formula CH₂:C(R)CONH(CH₂)_nOR₁ and 70-99 wt. % neutral monomer. Thus, 100 parts 50% aq. dispersion of copolymer (57% CH₂: CHCO₂Et + 36% CH₂: CHCO₂Bu + 7% CH₂: CMeCONH₂), 4.8 parts 80% N(CH₂CH₂OH)₃, 1.6 parts oxyethylated starch (.apprx.4% combined ethylene oxide), 6.4 parts 30% tert-C₈H₁₇H₄(OCH₂CH₂)₂SO₃Na, and 3.2 parts 70% tert-C₈H₁₇C₆H₄O(CH₂CH₂)_nH (av. n = 16) are placed in an open receiver. The mixt. is agitated and heated to .apprx.50.degree., 4.8 parts 10% HCl is added, and the mixt. is heated to give a foam. The foam is applied on a Teflon film and heated for 0.5 hr. at 150.degree. to give a material which is removed from the film and is stable to solvents; a cotton cloth is coated with the foam and the material is heated for 0.5 hr. at 150.degree. to give good adhesion.

IT Coating(s)

(of textiles, with Et acrylate polymer foams)

IT 7-Oxabicyclo[4.1.0]heptane, (epoxyethyl)-

(as gelling agent in foams of Et acrylate polymers with reactive monomers)

IT Acrylamide, N-(hydroxymethyl)-, polymers of, with acrylamide, Et acrylate (etc., foamed by agitation and gelled)

IT Acrylamide, N-(methoxymethyl)-, polymers with Et acrylate

Acrylic acid, butyl ester polymers with Et acrylate and methacrylamide

Acrylonitrile polymers (including copolymers), with acrylamide, Et acrylate and N-methylol-acrylamide

Ethylene, 1,1-dichloro-, polymer with acrylamide, Et acrylate and methylolacrylamide

Methacrylamide, polymers with Bu and Et acrylates

Methacrylic acid, polymers, with Et acrylate and glycidyl methacrylate (foamed by agitation and gelled)

IT Ethanol, 2,2'-thiodi-, polymer, with Et acrylate

(foamed by agitation and gelled by bis(methoxymethyl)urea)

IT Benzenesulfonic acid, vinyl-, sodium salt, polymers with Et acrylate (foamed by agitation and gelled by ethylenediamine)

IT Acrylic acid, 2-hydroxyethyl ester, polymers, with Et acrylate

(foamed by agitation and gelled by tris(methoxymethyl) melamine)

IT Methacrylic acid, ester with (2-hydroxyethyl)urea, polymer with Et acrylate

(foamed by agitation and gelled by tris(methoxymethyl)melamine)

IT Hypophosphorous acid

(polyesters (Cl-contg.) modified by, urethan-polymer foams from polyethers, polyisocyanates and)

IT 107-15-3, Ethylenediamine

(as gelling agent in cellular Et acrylate polymers with styrenesulfonic acid)